REMARKS

Claims 7-38 are pending in this application. Claims 1-6 have been canceled without prejudice or disclaimer. Claims 22-25 have been withdrawn from consideration as being directed to a non-elected invention. Claims 30-38 have been newly added.

Claim 10 has been amended to correct a grammatical error. Specifically, the term "is" has been canceled without prejudice or disclaimer from claim 10 and replaced with the term "does." Claim 29 has been amended to correct the claim number.

Claim 27 has been amended so that the phrase "or the synthetic JEV of claim 22" has been deleted without prejudice or disclaimer.

Newly added claim 38 is directed to "An anti-JEV vaccine containing elements originated from the synthetic JEV of claim 22. Support for newly added claim 38 can be found in claim 27 as originally filed.

A. Allowable Subject Matter

Applicants thank the Examiner for the indication that claims 12 and 15-17 would be allowable if rewritten in independent form. Additionally, Applicants thank the Examiner for the telephone interview of March 14, 2008 regarding the same with Applicants undersigned representatives. Further to the telephone interview, Applicants have added new claims 30-38. Newly added claims 30-38 are directed to the subject matter of claims 12 and 15-17 which was identified as allowable in the Official Action of September 14, 2007, and clarified during the interview of March 14, 2008.

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New claim 30 is directed to "A full length infectious and genetically stable

cDNA clone of Japanese encephalitis virus (JEV), comprising: SEQ. ID. No 45

having SP6 promoter, wherein the cDNA clone contains a promoter at the

beginning of 5' end of a DNA sequence corresponding to a JEV genomic RNA

and a restriction endonuclease recognition sequence at the end of 3' end of the

DNA sequence as a runoff site." Support for new claim 30 can be found, for

example, in claims 7, 8 and 12 as originally filed.

New claim 31 is directed to "A vector, comprising: a full length infectious

and genetically stable cDNA clone of Japanese encephalitis virus (JEV), wherein

the vector is pBAC^{SP6}/JVFLx/Xbal." New claim 32 is directed to "The vector

according to claim 31, wherein the vector is pBAC^{SP6}/JVFLx/Xbal having SP6

promoter (Accession No: KCTC 10347BP)." New claim 33 is directed to "The

vector according to claim 31, wherein the JEV comprises SEQ. ID. No 45."

Support for new claims 31-33 can be found, for example, in claims 7, 13 and 15-

17 as originally filed. Support for new claim 34 can be found, for example, in

claims 7, 8 and 12 as originally filed.

New claim 34 is directed to "A full length infectious and genetically stable

cDNA clone of Japanese encephalitis virus (JEV), comprising: SEQ. ID. No 48

having T7 promoter, wherein the cDNA clone contains a promoter at the

beginning of 5' end of a DNA sequence corresponding to a JEV genomic RNA

and a restriction endonuclease recognition sequence at the end of 3' end of the

DNA sequence as a runoff site."

New claim 35 is directed to "A vector, comprising: a full length infectious

and genetically stable cDNA clone of Japanese encephalitis virus (JEV), wherein

the vector is pBACT7/JVFLx/Xbal." New claim 36 is directed to "The vector

according to claim 35, wherein the vector is pBACT7/JVFLx/Xbal having T7

promoter (Accession No: KCTC 10346BP)." New claim 37 is directed to "The

vector according to claim 35, wherein the JEV comprises SEQ. ID. No 48."

Support for new claims 35-37 can be found, for example, in claims 7, 13 and 15-

17 as originally filed.

No new matter has been added.

In view of the following, further and favorable consideration is respectfully

requested.

I. At page 3 Official Action claims 10, 12, 15, 27, and 28 have been

objected to.

The Examiner objects to claims 10, 12, 15, 27, and 28 for the following

reasons: (a) the Examiner asserts claim 28 as being numbered incorrectly; (b)

the Examiner asserts that claim 10 is not grammatically correct because the

claim recites the phrase "sequence is not exist;" (c) the Examiner objects to

claims 12 and 15 for reciting multiple sequence identifiers, which are allegedly

drawn to nonelected inventions; and (d) the Examiner objects to claim 27 as

containing subject matter allegedly drawn to a non elected invention.

Applicants respectfully traverse the objections to the claims.

With regard to (a), Applicants respectfully submit that this claim has been

amended to read 29 rather than 28. Accordingly, Applicants submit that the

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claims no longer contain duplicate claim numbers. Accordingly, the Examiner is respectfully requested to withdraw this objection.

With regard to (b), Applicants submit that claim 10 has been amended to recite the phrase "sequence does not exist" rather than the phrase "sequence is not exist." Accordingly, Applicants submit that amended claim 10 is now grammatically correct. Accordingly, the Examiner is respectfully requested to withdraw this objection.

With regard to (c), Applicants respectfully submit that although Applicants elected SEQ ID No. 45 in the Response to Restriction Requirement submitted on June 19, 2007 the election should not require cancelation of subject matter from pending claims. In this regard, Applicants submit that, at most, the election of SEQ ID should be considered an *election of species* and not a group election. As such, Applicants submit the non-elected subject matter should not be deleted or cancelled from claims 12 and 15 unless it is found unpatentable upon search and examination. In this regard, all of the subject matter recited in claims 12 and 15 should remain pending until found unpatentable. Accordingly, Applicants respectfully submit that the rejection of claims 12 and 15 is improper. Accordingly, the Examiner is respectfully requested to withdraw this objection.

With regard to (d), Applicants submit that claim 27 has been amended so that the phrase "or the synthetic JEV of claim 22" has been deleted without prejudice or disclaimer. Therefore, this objection has been obviated. Accordingly, the Examiner is respectfully requested to withdraw this objection.

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II. At page 3 of the Official Action, claims 16 and 17 have been rejected under 35 USC § 112, first paragraph, as failing to comply with the enablement requirement.

The Examiner asserts that there is no indication in the specification as to public availability with regard to the deposited DNA.

Applicants respectfully traverse this rejection.

Applicants respectfully submit that a Receipt in the Case of an Original Deposit issued pursuant to Rule 7.1 according to the Budapest Treaty appears for each of Accession No: KCTC 10347BP and Accession No: KCTC 10346BP at pages 117 and 118 of the originally filed specification. However, for the Examiners convenience, Applicants submit herewith copies of each of page 117 and 118 of the originally filed specification.

Therefore, Applicants submit that claims 16 and 17 satisfy enablement requirement of 35 USC § 112, first paragraph. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

III. At page 6 of the Official Action, claims 26 and 27 have been rejected under 35 USC § 112, second paragraph.

Specifically, the Examiner asserts that claims 26 and 27 are allegedly indefinite because the term "elements" can be interpreted as a small portion of the JEV cDNA clone.

Applicants respectfully traverse this rejection.

Claim 26 is directed to "A diagnostic reagent containing elements originated from the cDNA clone of claim 7." Claim 27 is directed to "An anti-JEV vaccine containing elements originated from the JEV cDNA clone of claim.

Applicants respectfully submit that a person of ordinary skill in the art would be able to fully ascertain the meaning of the term elements in each of claims 26 and 27. Therefore, Applicants submit that the term "elements" is clear and definite within the meaning of 35 USC § 112, second paragraph. Accordingly, the Examiner is respectfully requested to withdraw this rejection.

IV. At page 7 of the Official Action, claims 7-10, 13, 18, and 29, have been rejected under 35 USC § 102(a) as being anticipated by Mishin et al.

The Examiner asserts that Mishin et al. (of record) teach an infectious clone of Japanese encephalitis flavivirus wherein the promoter is at the 5' end and the endonuclease restriction sites are at the 3' end. The promoter is T7 and a plasmid contains the full size JEV cDNA. The Examiner also asserts that Mishin et al. teach the flavivirus RNA has a short 5' untranslated region and synthetic RNA.

In view of the remarks herein, this rejection is respectfully traversed.

Anticipation under 35 USC § 102 requires that a single prior art reference describe each and every element of the claimed invention. See Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The identical invention must be shown in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131. The elements must also be arranged as required by the claim. In re Bond, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicant respectfully submits that Mishin et al. do not teach each and every element of claims 7-10, 13, 18, and 29 as required for anticipation under 35 USC § 102. Independent claim 7 is directed to "A full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV)." Claims 8-10, 13, 18 and 29, depend, either directly or indirectly, from claim 7.

In contrast to the presently pending subject matter, Mishin et al. is directed to "Using a *highly unstable* representative infections clone of Japanese encephalitis (JE) flavirus..." to test an approach of designing infections DNA constructs, which is based on the minimization of transcription in the bacterial host. See Mishin et al. at the abstract. (Emphasis added). However Mishin et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed.

Therefore, it is submitted that Mishin et al. fails to teach each and every element of the present claims 7-10, 13, 18, and 29 as required for anticipation under 35 USC § 102 (b). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

V. At page 7 of the Official Action, claims 7-11, 13, 18-19, 21 and 29, have been rejected under 35 USC § 102(a) as being anticipated by Zhang et al.

The Examiner asserts that Zhang et al. (of record) teaches a technique to produce genome length cDNA stable clone from Japanese encephalitis virus.

In view of the remarks herein, this rejection is respectfully traversed.

In view of the remarks herein, this rejection is respectfully traversed.

Anticipation under 35 USC § 102 requires that a single prior art reference describe each and every element of the claimed invention. See Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The identical invention must be shown in as complete detail as is contained in the claim. Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131. The elements must also be arranged as required by the claim. In re Bond, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicant respectfully submits that Zhang et al. do not teach each and every element of claims 7-11, 13, 18-19, 21 and 29 as required for anticipation under 35 USC § 102. Independent claim 7 is directed to "A full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV)." Claims 8-11, 13, 18-19, 21 and 29, depend, either directly or indirectly, from claim 7.

In contrast to the presently pending subject matter, Zhang et al. is directed to rapid full-length long RT-PCR technique to produce genome-length cDNA from Japanese encephalitis virus. See Zhang et al. at the abstract. However Zhang et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed.

Therefore, it is submitted that Zhang et al. fails to teach each and every element of the present claims 7-11, 13, 18-19, 21 and 29 as required for anticipation under 35 USC § 102 (b). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

VI. At page 8 of the Official Action, claims 7-11, 13 and 18-21, have been rejected under 35 USC § 102(b) as being anticipated by Sumiyoshi et al.

The Examiner asserts that Sumiyoshi et al. (of record) teaches that a full length infectious cDNA copy of the JEV genome was constructed.

In view of the remarks herein, this rejection is respectfully traversed.

Anticipation under 35 USC § 102 requires that a single prior art reference describe each and every element of the claimed invention. *See Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131. The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicant respectfully submits that Sumiyoshi et al. do not teach each and every element of claims 7-11, 13 and 18-21 as required for anticipation under 35 USC § 102. Independent claim 7 is directed to "A full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV)." Claims 8-11, 13 and 18-21, depend, either directly or indirectly, from claim 7.

In contrast to the presently pending subject matter, Sumiyoshi et al. is directed to genomic Japanese encephalitis virus RNA. See Sumiyoshi et al. at the abstract. However Sumiyoshi et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed.

Therefore, it is submitted that Sumiyoshi et al. fails to teach each and every element of the present claims 7-11, 13 and 18-21 as required for anticipation under 35 USC § 102 (b). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

VII. At page 9 of the Official Action, claim 27 has been rejected under 35 USC § 102(b) as being anticipated by Chang et al.

The Examiner asserts that Chang et al. (of record) teaches plasmid vectors containing Japanese encephalitis virus (JEV) DNA were used to successfully vaccinate animals.

In view of the remarks herein, this rejection is respectfully traversed.

Anticipation under 35 USC § 102 requires that a single prior art reference describe each and every element of the claimed invention. *See Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); MPEP § 2131. The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989); MPEP §2131. The elements must also be arranged as required by the claim. *In re Bond*, 15 USPQ2d 1566 (Fed. Cir. 1990).

Applicant respectfully submits that Chang et al. do not teach each and every element of claim 29 as required for anticipation under 35 USC § 102. Independent claim 7 is directed to "A full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV)." Claim 29, depends from claim 7.

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In contrast to the presently pending subject matter, Chang et al. is directed to the construction of plasmid vectors containing Japanese encephalitis virus permembrane and envelope genes. See Chang et al. at the abstract. However Chang et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed.

Therefore, it is submitted that Chang et al. fails to teach each and every element of the present claims 7-11, 13 and 18-21 as required for anticipation under 35 USC § 102 (b). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

VII. At page 10 of the Official Action, claims 7-11, 13, 18-21 and 26-29, have been rejected under 35 USC § 103(a) as being unpatentable over Zhang et al. and Sumiyoshi et al. further in view of Chang et al.

The Examiner asserts that it would have been obvious to the skilled artisan to use the full-length cDNA infectious clones as diagnostic tools and for therapeutic/vaccine use.

Applicants respectfully traverse this rejection because *prima facie* case of obviousness has not been established.

To establish a *prima facie* case of obviousness, the Examiner must satisfy three requirements. First, as the U.S. Supreme Court very recently held in *KSR International Co. v. Teleflex Inc. et al., KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007), "a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. ...it [may] be necessary for a court to look to interrelated teachings of multiple

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patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. ...it can be important to identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does... because inventions in most, if not all, instances rely upon building blocks long since uncovered, and claimed discoveries almost of necessity will be combinations of what, in some sense, is already known." (KSR, supra, slip opinion at 13-15.) Second, the proposed modification of the prior art must have had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was made. Amgen Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991). Lastly, the prior art references must teach or suggest all the limitations of the claims. In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

It is submitted that a proper case of *prima facie* obviousness has not been established because none of the cited art, whether taken alone or in combination, teach or suggest each and every element of the presently pending subject matter.

As discussed, independent claim 7 is directed to "A full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV)." Claims 8-11, 13, 18-21 and 26-29, depend, either directly or indirectly, from claim 7.

Each of Zhang et al., Sumiyoshi et al. and Chang et al. are discussed above. In contrast to the presently pending subject matter, Zhang et al. is directed to rapid full-length long RT-PCR technique to produce genome-length cDNA from Japanese encephalitis virus. See Zhang et al. at the abstract.

However Zhang et al. do not teach a full length infectious and genetically stable

cDNA clone of Japanese encephalitis virus (JEV), as presently claimed.

Sumiyoshi et al. do not remedy the deficiencies of Zhang et al. Sumiyoshi et al. is directed to genomic Japanese encephalitis virus RNA. See Sumiyoshi et al. at the abstract. However, like Zhang et al, Sumiyoshi et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed. Therefore, whether taken alone or in combination, none of Zhang et al. and Sumiyoshi et al. teach or suggest every element of the present pending subject matter.

Chang et al. do not remedy the deficiencies of Zhang et al. and Sumiyoshi et al. In contrast to the presently pending subject matter, Chang et al. is directed to the construction of plasmid vectors containing Japanese encephalitis virus permembrane and envelope genes. See Chang et al. at the abstract. However Chang et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed. Therefore, whether taken alone or in combination, none of Zhang et al., Sumiyoshi et al. or Chang et al. teach or suggest every element of the present pending subject matter.

In view of the remarks and data set forth herein, it is submitted that nothing in any of the applied references, taken alone or together, renders claims 7-11, 13, 18-21 and 26-29, obvious within the meaning of 35 USC § 103 (a). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

IX. At page 11 of the Official Action, claims 7-11, 13-14, 18-21 and 29, have been rejected under 35 USC § 103(a) as being unpatentable over Zhang et al. and Sumiyoshi et al. further in view of Schumacher et al.

The Examiner asserts that it would have been obvious to the skilled artisan to use a BAC vector as taught by Schumacher in the JEV clone as taught by Zhang and Sumiyoshi.

Applicants respectfully traverse this rejection because *prima facie* case of obviousness has not been established.

To establish a *prima facie* case of obviousness, the Examiner must satisfy three requirements. First, as the U.S. Supreme Court very recently held in *KSR International Co. v. Teleflex Inc. et al.*, *KSR Int'l Co. v. Teleflex Inc.*, 127 S. Ct. 1727 (2007), "a court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions. ...it [may] be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. ...it can be important to identify a reason that would have prompted a

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person of ordinary skill in the relevant field to combine the elements in the way

the claimed new invention does... because inventions in most, if not all, instances

rely upon building blocks long since uncovered, and claimed discoveries almost

of necessity will be combinations of what, in some sense, is already known."

(KSR, supra, slip opinion at 13-15.) Second, the proposed modification of the

prior art must have had a reasonable expectation of success, determined from

the vantage point of the skilled artisan at the time the invention was made.

Amgen Inc. v. Chugai Pharm. Co., 18 USPQ2d 1016, 1023 (Fed. Cir. 1991).

Lastly, the prior art references must teach or suggest all the limitations of the

claims. In re Wilson, 165 USPQ 494, 496 (C.C.P.A. 1970).

It is submitted that a proper case of prima facie obviousness has not been

established because none of the cited art, whether taken alone or in combination,

teach or suggest each and every element of the presently pending subject

matter.

As discussed, independent claim 7 is directed to "A full length infectious

and genetically stable cDNA clone of Japanese encephalitis virus (JEV)." Claims

8-11, 13, 18-21 and 26-29, depend, either directly or indirectly, from claim 7.

Each of Zhang et al., Sumiyoshi et al. and Schumacher et al. are

discussed above. In contrast to the presently pending subject matter, Zhang et

al. is directed to rapid full-length long RT-PCR technique to produce genome-

length cDNA from Japanese encephalitis virus. See Zhang et al. at the abstract.

However Zhang et al. do not teach a full length infectious and genetically stable

cDNA clone of Japanese encephalitis virus (JEV), as presently claimed.

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Sumiyoshi et al. do not remedy the deficiencies of Zhang et al. Sumiyoshi et al. is directed to genomic Japanese encephalitis virus RNA. See Sumiyoshi et al. at the abstract. However, like Zhang et al, Sumiyoshi et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed. Therefore, whether taken alone or in combination, none of Zhang et al. and Sumiyoshi et al. teach or suggest every element of the present pending subject matter.

Schumacher et al. do not remedy the deficiencies of Zhang et al. and Sumiyoshi et al. In contrast to the presently pending subject matter, Schumacher et al. is directed to the cloning of the complete genome of Marek's disease birus serotype 1 strain 584Ap80C in *E. Coli* as a bacterial artificial chromosome. See Schumacher et al. at the abstract. However Schumacher et al. do not teach a full length infectious and genetically stable cDNA clone of Japanese encephalitis virus (JEV), as presently claimed. Therefore, whether taken alone or in combination, none of Zhang et al., Sumiyoshi et al. or Schumacher et al. teach or suggest every element of the present pending subject matter.

In view of the remarks and data set forth herein, it is submitted that nothing in any of the applied references, taken alone or together, renders claims 7-11, 13, 18-21 and 26-29, obvious within the meaning of 35 USC § 103 (a). Accordingly, the Examiner is respectfully requested to withdraw this rejection.

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Conclusion

In view of the foregoing, Applicants submit that the application is in condition for immediate allowance. Early notice to that effect is earnestly solicited. The Examiner is invited to contact the undersigned attorney if it is believed that such contact will expedite the prosecution of the application.

In the event this paper is not timely filed, Applicants petition for an appropriate extension of time. Please charge any fee deficiency or credit any overpayment to Deposit Account No. 14-0112.

Respectfully submitted,

THE NATH LAW GROUP

Gary M. Nath

Registration No. 26,965 Susanne M. Hopkins Registration No. 33,247

Ari G. Zytcer

Registration No. 57,474 Customer No. 20259

Date: March 14, 2008 THE NATH LAW GROUP 112 South West Street Alexandria, VA 22314 Tel: (703) 548-NATH

Fax: (703) 683-8396

BUDDAYEST TREATY ON JIE ENTERNATIONAL RECUGNITION OF THE HEISTELL OF MICHOORGANIENS FOR THE PURPOSE OF PATIONS HE KERPRIS.

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT

issued pursuant to Rule 7.1

(IC): LEE, Young-Min
College of Medicine, Chungbuk National University,
#48. Gaeshin-dong, Heungduk-ku, Cheongju-si, Chungbuk (#6) 763,
Republic of Korea

1. IDENTIFICATION OF THE MICROORGANISM

Identification reference given by the DEPOSITOR:

pBAC¹⁷/JVFLx/Xbal (plasmid) i

Accession number given by the INTERNATIONAL DEPOSITARY AUTHORITY:

KCTC 1034613P

II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION

The microorganism identified under I above was accompanied by:

| x | a scientific description

I) a proposed taxonomic designation (Mark with a cross where applicable).

III. RECEIPT AND ACCEPTANCE

This International Depositary Authority accepts the microorganism identified under I above, which was received by it on October 02 2002.

IV. RECEIPT OF REQUEST FOR CONVERSION

The microorganism identified under I above was received by this International Depositury Authority on and a request to convert the original deposit to a deposit under the Budapest Treaty was received by it on

V. INTERNATIONAL DEPOSITARY AUTHORITY

Name: Korean Collection for Type Cultures

Address: Korea Research Institute of

Bioscience and Biotechnology

(KRIBB)

#52, Oun-dong, Yusong-ku,

Taejon 305-333.

Republic of Korea

Signature(s) of person(s) having the power to represent the International Depositary Authority of authorized official(s):

PARK Yong-Ha, Director Date: October 04 2002

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HIDARDST TIBATY ON THE INTERNATIONAL DECOUNTRIN (4: THE 1424 CET UP MICHOORGANISMS FOR THE PURPOSE OF PATHOT MAKERING.

INTERNATIONAL FORM

RECEIPT IN THE CASE OF AN ORIGINAL DEPOSIT

issued pursuant to Rule 7.1

TO: I.EE. Young-Min
College of Medicine, Chungbuk National University,
#48. Gaeshin-dong, Heungduk-ku, Cheongju-si, Chungbuk 361-763,
Republic of Korea

1. IDENTIFICATION OF THE MICROORGANISM	
Identification reference given by the DEPOSITOR: pBACSPS/JVFLx/Xbal (plasmid) :=	Accession number given by the INTERNATIONAL DEPOSITARY AUTHORITY: KCTC 10347BP
II. SCIENTIFIC DESCRIPTION AND/OR PROPOSED TAXONOMIC DESIGNATION	
The microorganism identified under l'above was accompanied by: [x] a scientific description [] a propused taxonomic designation (Mark with a cross where applicable)	
III. RECEIPT AND ACCEPTANCE	
This International Depositary Authority accepts the microorganism identified under I above, which was received by it on October 02 2002.	
N. RECEIPT OF REQUEST FOR CONVERSION	
The microorganism identified under I above was received by this International Depositary Authority on and a request to convert the original disastit to a deposit under the Budapest Treaty was received by it on	
V. INTERNATIONAL DEPOSITARY AUTHORITY	
Name: Korean Collection for Type Cultures	Signature(s) of person(s) having the power to represent the international Depositary Authority of authorized official(s):
Address: Korea Research Institute of Bioscience and Biotechnology (KRIBB) #52, Oun-dong, Yusong-ku, Taejon 305 333, Republic of Korea	PARK Yong-Hu, Director Date: October 04 2002

Portio DIVI (RCTC Form 17)

wa. Infin